Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

Date Submitted: 4/16/2012

Water Use Efficiency
Annual Performance Report - 2011

WS Name: WATER DISTRICT 19

Water System ID# : 38900 WS County: KING

Report submitted by: *Armin Wahanik*

Meter Installation Information:

Estimate the percentage of metered connections: *100%*

If not 100% metered – Did you submit a meter installation plan to DOH? No

Within your meter installation plan, what date did you commit to completing meter installation?

Current status of meter installation:

Production, Authorized Consumption, and Distribution System Leakage Information:

12-Month WUE Reporting Period *01/01/2011* To *12/31/2011*

Incomplete or missing data for the year? *No*

If yes, explain:

Total Water Produced & Purchased (TP) – Annual volume gallons	*106,317,455*	gallons	
Authorized Consumption (AC) – Annual Volume in gallons	*98,638,280*	gallons	
Distribution System Leakage – Annual Volume TP – AC	*7,679,175*	gallons	
Distribution System Leakage – DSL = [(TP – AC) / TP] x 100 %	*7.2 %*		
3-year annual average - %	*6.1 %*		*2009, 2010, 2011*

Goal-Setting Information:

Enter the date of most recent public forum to establish WUE goal: *11/13/2007*

Has goal been changed since last performance report? *No*

Note: Customer goal must be re-established every 6 years through a public process.

Customer WUE Goal (Demand Side):

1. *Reduce water consumption by 2% per ERU during the summer months.*
2. *Encourage and educate the conservation ethic in customers.*
3. *Respond to citizen concerns regarding effective resource use.*
4. *Educate customers about water supply issues.*
5. *Defer future capital costs for new supply and treatment facilities.*
6. *Protect natural resources.*
7. *Comply with state guidelines.*

Customer (Demand Side) Goal Progress:

Compared to a five year average (2005 - 2009), yearly production was reduced by 7.4% in 2011. The District issued 15 High Efficiency Appliance Rebates which has led to an estimated savings of 111,000 gallons per year. We identified and prioritized waterlines needing replacement in our Comprehensive Plan, and have initiated a aggressive water main replacement program. We have implemented steeper inclining block rates to establish Conservation Pricing. We offer water conservation "Welcome Kits" to new customers. Our meter readers are trained to identify potential leaks, and our meter reading software informs the reader of high usage. We investigate every potential leak and consistently aid our customers in identifying leaks immediately upon reading their meter. In 2011 our leak detection contractor assessed the integrity of certain parts of our distribution system. Two hidden leaks were discovered and repaired. Participation in a local Energy Wise Fair promoting conservation strategies and goals. Numerous facililty tours to community groups highlighting our operating parameters and the need for conservation.

Additional Information Regarding Supply and Demand Side WUE Efforts

Describe Progress in Reaching Goals:

- Estimate how much water you saved.
- Report progress toward meeting goals within your established timeframe.
- Identify any WUE measures you are currently implementing.
- If you established a goal to maintain a historic level (such as maintaining daily consumption at 65 gallons per person per day for the next two years) you must explain why you are unable to reduce water use below that level.

The following questions will help DOH better understand water usage, water resources management and drought response. The data will be used to provide technical assistance, not for regulatory purposes.

All questions are voluntary

Month	Date of Measurement	Static Water Level (feet below measuring point)	Dynamic Water Level (feet below measuring point)
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

Water level data:

Please provide the following information (if known) to help us better utilize the water level data.

Well tag Id number:

Well depth:

Water level accuracy (within 0.01 ft < 1 ft ~ 1 ft)

Completion type (e.g., cased open interval, cased open-ended, cased open-ended with perforations, etc…)

Location coordinates (latitude, longitude) and accuracy of the coordinates (< 1ft, ~1ft, >1000ft)

Water level parameter name (e.g. depth below measuring point, depth below top of casing, depth below ground surface)

Elevation of top of casing OR elevation of measuring point if different than top of casing (as specified in question 7)

Monthly/Seasonal Water Usage:

What was your maximum daily water demand for the previous year (in gallons per day)? _____

Month	**Volume of Water Produced in gallons**
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	

Water shortage response:

Did you activate any level of water shortage response plan the previous year?

- ☐ Yes
- ☐ No
- ☐ There was no need to

If you activated a water shortage response plan the previous year, what level did you activate? (Check all that apply)

- ☐ Advisory Conservation
- ☐ Voluntary Conservation
- ☐ Mandatory Conservation
- ☐ Rationing
- ☐ Other

What factors caused your water shortage the previous year?

- ☐ Drought
- ☐ Fire
- ☐ Landslides
- ☐ Earthquakes
- ☐ Flooding
- ☐ Water Supply Limitations
- ☐ Other

Do not mail, fax, or email this report to DOH